

# ROUTING AND TRANSMITTAL SLIP

Date

02/27/96

TO: (Name, office symbol, room number, building, Agency/Post)

Initials

Date

1. *Meg Estep Johnson (WTR) 60180*

2.

3.

4.

5.

<input checked="" type="checkbox"/> Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

## REMARKS

*Meg.*

Would you please determine Net Depletion  
\* Colorado River for this proposed wetland  
development in Routt County, CO.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

Room No.—Bldg.

*Aspen NWR*

Phone No.

*970/723-8202*

5041-102

☆ U.S. G.P.O. 1991 281-781/40004

OPTIONAL FORM 41 (Rev. 7-76)  
Prescribed by GSA  
FPMR (41 CFR) 101-11.206

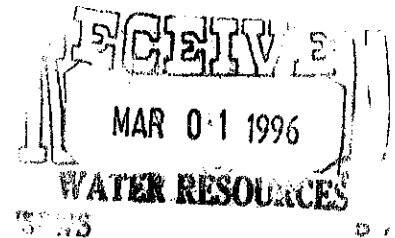


## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Arapaho National Wildlife Refuge  
PO Box 457, 953 Jackson County Rd. #32  
Walden, Colorado 80480  
Phone (303) 723-8202 Fax (303) 723-8528

February 27, 1996

Ms. Suzanne Knall  
US Corps of Engineers  
Sacramento District  
402 Rood Avenue, Room 142  
Grand Junction, CO 81501



Dear Ms. Knall:

I am writing to you in regards to a proposed wetland project on the Barbara A. Hankin property near Steamboat Springs, Colorado. The U.S. Fish and Wildlife Service plans to construct the wetland with funds from the Partners For Wildlife program. We conducted on site survey work for the project last summer. Mrs. Hankin has hired the services of Mr. Jim Ficke (environmental consultant) and he is her representative. We plan to begin construction of this project in the late summer months of 1996 pending approval and authorization for the various permits required. In accordance with the requirements of Nationwide Permit Number 27, the Fish and Wildlife Service is requesting use of that permit for this wetland creation near Steamboat Springs, Colorado.

The following is a description of the proposed development:

The project will involve the construction of a 280 foot long dike across a sub-irrigated meadow. The dike will be approximately three (3) feet high at the inlet and eight (8) feet across the top with three to one (3:1) upstream slope and two to one (2:1) downstream slope. The base width will be approximately twenty-three (23) feet. All of the fill material will be taken from the wetland basin.

A two foot stop-log water control structure will be installed. The development will create a small wetland of approximately 2.23 surface acres for wildlife habitat, especially migratory birds. Water depth at the water control structure will be approximately two (2) feet and the average depth of the wetland basin will be approximately one (1) foot. Water to fill this wetland will come from spring runoff, seepage from the Baxter Ditch, and a small water right that will be purchased.

I have discussed with Mr. Ficke the possible water depletion aspect of the project and its potential adverse impact on endangered

species and their habitats downstream in the Colorado River drainage. Our Water Resources Division will determine evapo-transpiration water losses resulting from this wetland development. The landowner has agreed to purchase additional water rights and replace any evapo-transpiration water losses resulting from this wetland development. This released water should address the Section 7 of the Endangered Species Act.

I would appreciate your review and response at your earliest convenience. If you have any questions please call me at the above address and telephone number.

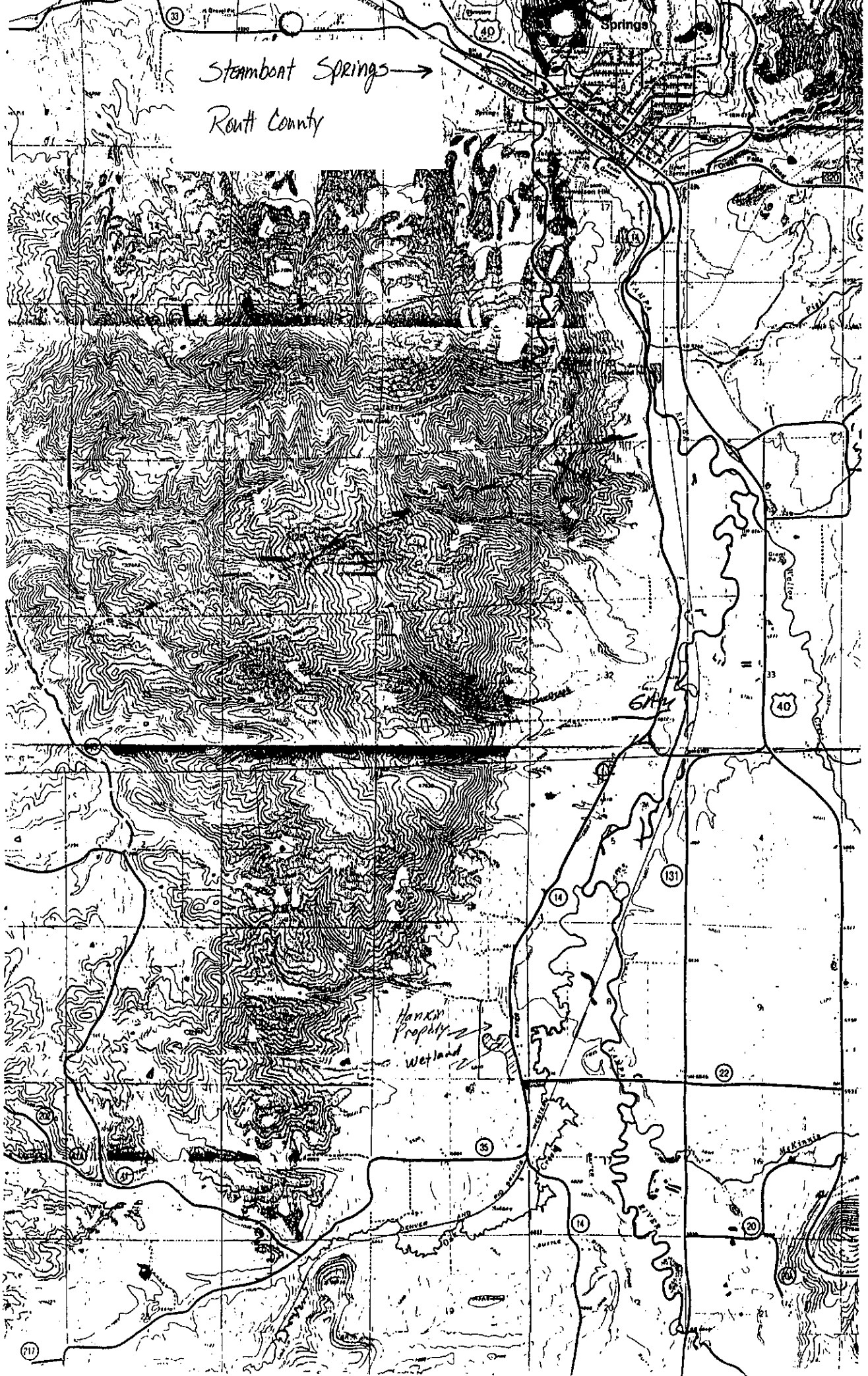
Sincerely,

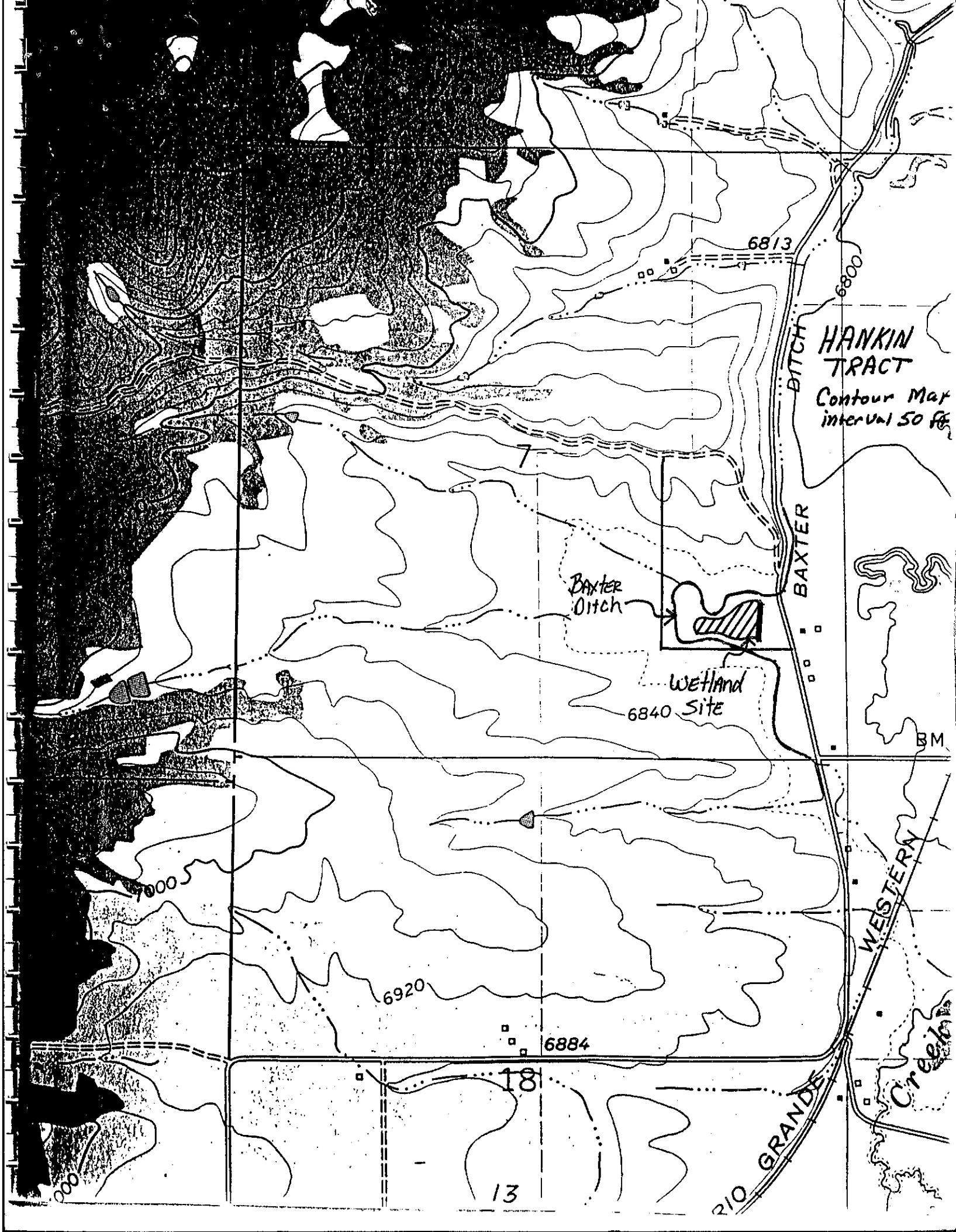
A handwritten signature in dark ink, appearing to read "Jerry Rodriguez", with a large, stylized flourish extending from the end of the signature.

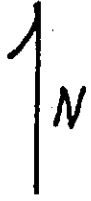
Jerry Rodriguez  
Refuge Operation Specialist

cc: Jim Ficke, Natural Resource Consultants, Steamboat Springs, CO  
Bill Noonan, FWS Ecological Services, Golden, CO  
Meg Estep Johnson, FWS Water Resources, Lakewood, CO

Steamboat Springs →  
Routt County







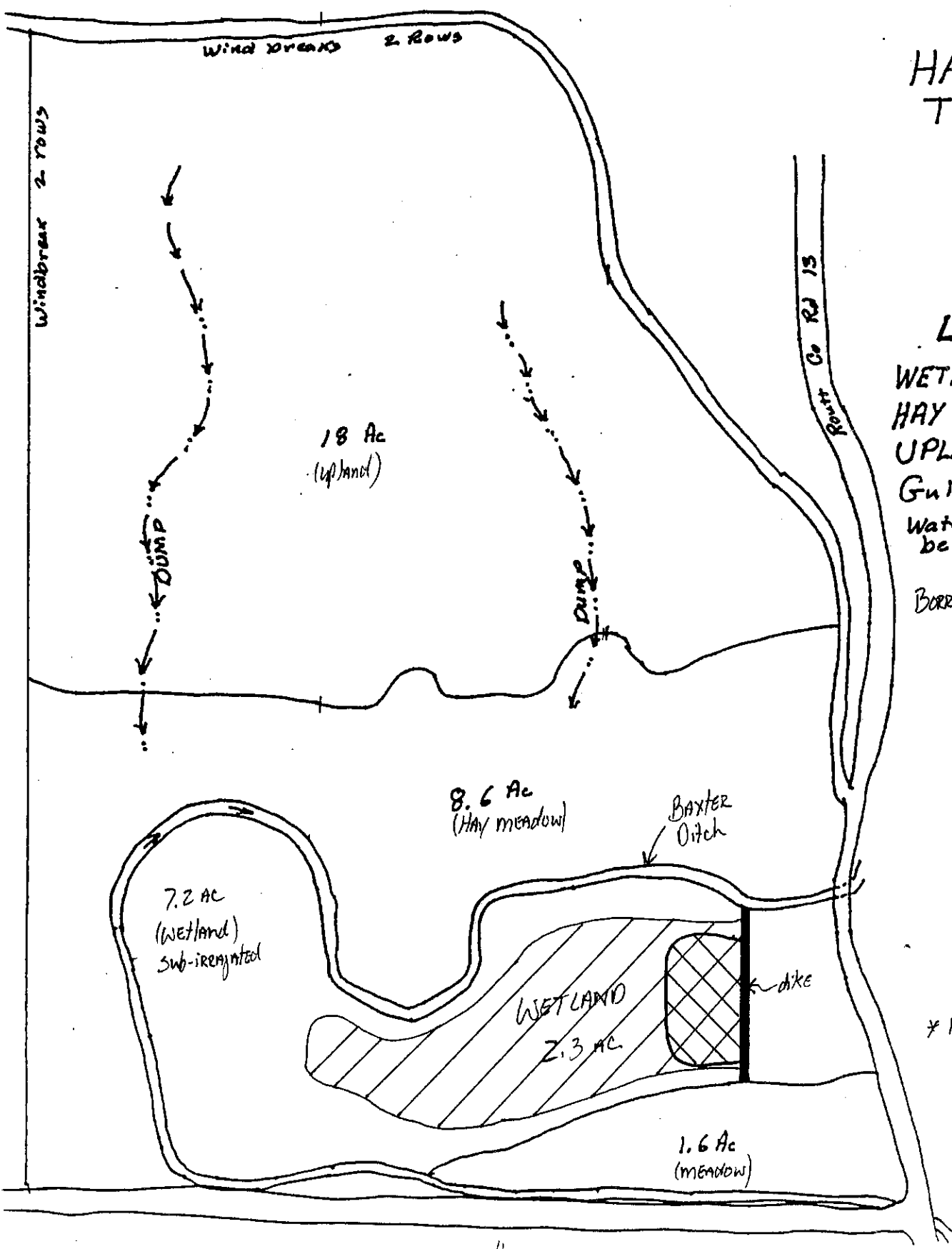
# HANKINS TRACT

## LEGEND

WETLAND  
HAY MEADOW  
UPLAND

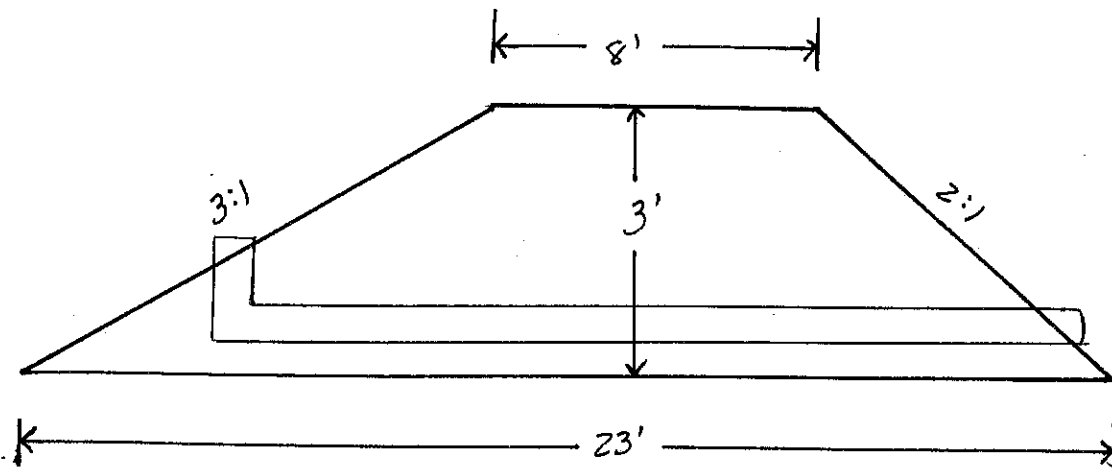
Gully →---→  
Water area to be Created →

BORROW AREA →



\* Not to scale

Hankin Wetland  
Steamboat Springs, CO



Dike length = 280 ft

$$\frac{3 \times 9}{2} = 13.5 \text{ ft}^2$$

$$46.5 \text{ ft}^2 \times 280 \text{ ft} = 13,020 \text{ ft}^3$$

$$\frac{3 \times 6}{2} = 9 \text{ ft}^2$$

$$\frac{13,020 \text{ ft}^3}{27 \frac{\text{ft}^3}{\text{yd}^3}} = 482 \text{ yds}^3$$

$$3 \times 8 = \frac{24 \text{ ft}^2}{46.5 \text{ ft}^2}$$

$$23 \text{ ft} \times 280 \text{ ft} = 6,440 \text{ ft}^2$$

$$43,560 \text{ ft}^2 = 1 \text{ ac}$$

$$\frac{6,440}{43,560} = 0.15 \text{ AC (dike fill)}$$